IN THE CLAIMS

 (Previously Presented) A device for processing packets in a network, comprising:

a receiver operable to receive a packet flow, the packet flow including encoded information;

a detector operable to determine if the encoded information in the packet flow includes a pause;

a processor operable to fragment a packet in the packet flow into two or more fragmented packets, the processor operable to adjust fragmentation of packets in the packet flow according to whether the encoded information in the packet flow includes the pause.

- 2. (Previously Presented) The device of Claim 1, wherein the processor will not perform fragmentation of the packet flow in response to the encoded information in the packet flow including the pause.
- 3. (Previously Presented) The device of Claim 1, wherein the processor performs fragmentation of the packet flow in response to the encoded information in the packet flow not including the pause.
- 4. (Original) The device of Claim 3, wherein the processor fragments those packets of the packet flow that exceed a predetermined local state size.
- 5. (Original) The device of Claim 4, wherein the predetermined local state size is associated with a different packet flow.

- 6. (Previously Presented) The device of Claim 1, wherein the receiver receives a plurality of packet flows, each of the plurality of packet flows including encoded information, the detector operable to determine if the encoded information of each of the packet flows includes a pause, the processor operable to adjust fragmentation of each of the plurality of packet flows according to whether any of the encoded information of the packet flows includes the pause.
- 7. (Previously Presented) A device for processing packets in a network, comprising:
 - a receiver operable to receive a packet flow;
- a detector operable to determine if the packet flow includes a pause;
- a processor operable to adjust fragmentation of packets in the packet flow according to whether the packet flow includes the pause;

wherein the receiver receives a plurality of packet flows, the detector operable to determine if each of the packet flows includes a pause, the processor operable to adjust fragmentation of each of the plurality of packet flows according to whether any of the packet flows includes the pause;

wherein a first one of the plurality of packet flows includes a relatively short pause, a second one of the plurality of packet flows includes a relatively long pause, the processor operable to perform fragmentation of the first and second ones of the packet flows according to characteristics associated with the first one of the plurality of packet flows.

- 8. (Original) The device of Claim 7, wherein the processor is operable to perform fragmentation of the second one of the plurality of packet flows according to characteristics associated with the second one of the plurality of packet flows in response to termination of the first one of the plurality of packet flows.
- 9. (Original) The device of Claim 1, wherein a packet of the packet flow indicates whether the packet flow includes the pause.
- 10. (Original) The device of Claim 1, wherein the detector is operable to determine whether the packet flow includes the pause in response to a receipt frequency of packets in the packet flow.
- 11. (Previously Presented) A method for processing packets in a network, comprising:

receiving a packet flow, the packet flow including encoded information;

determining if the encoded information in the packet flow includes a pause;

fragmenting a packet in the packet flow into two or more fragmented packets;

adjusting fragmentation of packets in the packet flow according to whether the encoded information in the packet flow includes the pause.

12. (Previously Presented) The method of Claim 11, further comprising:

performing fragmentation of packets in the packet flow in response to the encoded information in the packet flow not including the pause.

13. (Original) The method of Claim 12, further comprising:

fragmenting those packets in the packet flow exceeding a predetermined size.

- 14. (Previously Presented) The method of Claim 13, wherein the predetermined size is associated with a state characteristic of the packet flow.
- 15. (Original) The method of Claim 13, wherein the predetermined size is associated with a state characteristic of a different packet flow.
- 16. (Previously Presented) A system for processing packets in a network, comprising:

means for receiving a packet flow, the packet flow including encoded information;

means for determining if the encoded information in the packet flow includes a pause;

means for fragmenting a packet in the packet flow into two or more fragmented packets;

means for adjusting fragmentation of packets in the packet flow according to whether the encoded information in the packet flow includes the pause.

17. (Previously Presented) The system of Claim 16, further comprising:

means for performing fragmentation of packets in the packet flow in response to the encoded information in the packet flow not including the pause.

18. (Original) The system of Claim 17, further comprising:

means for fragmenting those packets in the packet flow exceeding a predetermined size.

19. (Previously Presented) A system for processing packets in a network, comprising:

means for receiving a packet flow;

means for determining if the packet flow includes a pause;

means for adjusting fragmentation of packets in the packet flow according to whether the packet flow includes the pause;

means for receiving a plurality of packet flows, a first one of the plurality of packet flows associated with a pause, a second one of the plurality of packet flows associated with no pause or a pause shorter than that of the first one of the plurality of packet flows;

means for fragmenting packets of the first and second ones of the packet flows according to state characteristics associated with the second one of the plurality of packet flows.

- 20. (Original) The method of Claim 16, wherein the determining means includes means for determining a receipt frequency of packets in the packet flow.
- 21. (Previously Presented) A system for processing packets in a network, comprising:
- a sender operable to place information in packets of a packet flow, the sender operable to provide an indication as to whether the information in the packet flow includes a pause;
- a linking device operable to receive the packet flow from the sender, the linking device operable to fragment a packet in the packet flow into two or more fragmented packets, the linking device operable to adjust fragmentation of packets in the packet flow according to whether the information in the packet flow includes the pause;
- a receiver operable to receive the packet flow from the linking device.
- 22. (Original) The system of Claim 21, wherein the sender is operable to identify the pause in the information.
- 23. (Original) The system of Claim 22, wherein the sender is operable to classify the pause identified in the information.
- 24. (Original) The system of Claim 23, wherein the pause is classified according to whether one or more predefined limits are exceeded.

- 25. (Original) The system of Claim 24, wherein the sender is operable to adjust one or more bits of a packet in the packet flow to indicate a presence and a classification of the pause.
- 26. (Previously Presented) A computer readable medium including code for processing packets in a network, the code operable to:

receive a packet flow, the packet flow including encoded information;

determine if the encoded information in the packet flow includes a pause;

fragment a packet in the packet flow into two or more fragmented packets;

adjust fragmentation of packets in the packet flow according to whether the encoded information in the packet flow includes the pause.

27. (Previously Presented) The computer readable medium of Claim 26, wherein the code is further operable to:

perform fragmentation of packets in the packet flow in response to the encoded information in the packet flow not including the pause.

28. (Original) The computer readable medium of Claim 27, wherein the code is further operable to:

fragment those packets in the packet flow exceeding a predetermined size.

- 29. (Previously Presented) The computer readable medium of Claim 28, wherein the predetermined size is associated with a state characteristic of the packet flow.
- 30. (Previously Presented) The computer readable medium of Claim 28, wherein the predetermined size is associated with a state characteristic of a different packet flow.